

ROCKY FLATS PLANT, LAUNDRY FACILITY
(Building 778)
NE quad of Plant between bldgs. 776/777 & 707
Golden vicinity
Jefferson County
Colorado

HAER No. CO-83-AB

HAER
COLO
30-GOLD.V
1AB -

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
1849 C St. NW
Washington, DC 20240

HISTORIC AMERICAN ENGINEERING RECORD

ROCKY FLATS PLANT,
LAUNDRY BUILDING FACILITY HAER No. CO-83-AB
(Rocky Flats Plant, Building 778)

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Location: Rocky Flats Environmental Technology Site, Highway 93, Golden, Jefferson County, Colorado. Building 778 is located in the northeast quadrant of the Rocky Flats Plant (Plant) between Buildings 776/777 and Building 707.

Significance: This building is a primary contributor to the Rocky Flats Plant historic district, associated with the United States (U.S.) strategy of nuclear military deterrence during the Cold War, a strategy considered of major importance in preventing Soviet nuclear attack. Building 778 was constructed in 1957 as a support facility for the 700 complex plutonium production buildings. It was used to launder the white clothing and respirators required to be worn by Plant employees. All employees, except those working in low contamination areas such as the laboratories, were required to wear this protective clothing.

Description: Building 778 is a long, thin rectangular building connected to Buildings 776/777 and Building 707 by corridors. The building has a reinforced concrete slab foundation with corrugated metal and concrete block exterior walls. Interior walls are constructed of concrete, concrete block, gypsum board on metal studs, and ceramic tile. The roof is metal. It is a one-story building encompassing approximately 31,200 square feet.

Building 778 houses laundry facilities as well as showers, locker rooms, sanitary facilities, electric, machine, and sheet metal shops, and inert gas storage.

Building 778 is traversed by an overhead sealed chain conveyor used for transport of radioactive material between Buildings 777 and 707. The chain conveyor is under negative pressure to prevent leaks into the building.

History: Building 778 was constructed in 1957 as a support facility for the 700 complex plutonium production buildings. It was used to launder the white clothing (coats, pants, hats, underwear, socks, and booties) and respirators required to be worn by Plant employees. All employees, except those working in low contamination areas such as the laboratories, were required to wear this protective clothing.

Originally, Buildings 771, 881, and 991 had their own laundries, with Building 442 laundering the clothing from Building 444. After Building 778 was constructed, laundry from these four buildings was washed there. After 1976, when Building 442 was turned over to the filter installation group, all laundry on the site was handled in Building 778. Building 778 went out of service in 1991, with all laundry being processed through Building 566.

Laundry personnel washed, sorted, mended, folded, checked for contamination, and redistributed company-supplied clothing to locker rooms throughout the Plant. The clothing consisted of

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undershirts and shorts, socks, coveralls, shop coats, booties, caps, and bath towels. The laundry processed approximately 125,000 to 150,000 pounds of clothing each month. The laundry equipment included three 400-pound-capacity washer-extractors and six 100-pound-capacity dryers.

Decontaminated respirators were also cleaned in Building 778. Half-mask respirators were cleaned and dried in a spray-type washer with a steam-heated drying hood. Full-face masks were washed in a converted 100-pound-capacity clothes washer and dried in a 50-pound-capacity dryer with tumbler removed.

The exhaust air from all clothes dryers and washers was exhausted through a high-efficiency particulate air filter plenum. The exhaust stack downstream of the filters was routinely checked by radiation-monitoring personnel for any possible plutonium release. Laundry water was sent to the forced evaporation operations in Building 374. Prior to Building 374 becoming operational in 1980, laundry water was sent to Building 774 second-stage aqueous waste operations and then through the evaporator located there if the radioactivity of the water was above 1,667 picoCuries per liter. If radioactivity was below this level, the wastewater was sent to Pond B-2. When the Plant first began operations, laundry wastes were discharged directly to North Walnut Creek.

Sources: Colorado Department of Health. *Project Tasks 3 & 4 Final Draft Report. Reconstruction of Historical Rocky Flats Operations and Identification of Release Points (1992)*, by ChemRisk. Rocky Flats Repository. Golden, Colorado.

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Historians: D. Jayne Aaron, Environmental Designer, engineering-environmental Management, Inc. (e²M), 1997. Judith Berryman, Ph.D., Archaeologist, e²M, 1997.